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*Legislative Effects of Single-Member Vs. Multi-Member Districts**

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Theory: This project uses mathematical logic and results from spatial models to explain how parties in a legislature elected under a multi-member district system will differ from those elected under single-member plurality, holding all else constant.
Hypothesis: Under most circumstances, parties elected under multi-member districts will be more ideologically diverse than those elected under single-member plurality, all else being equal.
Methods: The above hypothesis is tested using interest group ratings for members of the Illinois General Assembly, a legislative body that has used both single-member and multi-member systems to elect its members.
Results: During the time when the Illinois House was elected by multi-member districts and the Senate was elected by single-member districts, parties in the House were consistently more ideologically diverse than their counterparts in the Senate. This difference disappears after the House adopts a single-member district system.

1. Introduction

In the past several years, redistricting has become a particularly onerous issue involving the courts, state legislatures, the Justice Department, and countless interest groups. As the issue has evolved over time, many of these actors have grown frustrated trying to meet the often contradictory standards imposed by the Voting Rights Act, which seeks to maximize minority representation, and recent Supreme Court decisions, which have questioned the legitimacy of "bizarrely" shaped legislative districts.[1] One response to this frustration has been an increased interest in alternative voting schemes, such as multi-member districts and cumulative voting, which ostensibly allow for greater minority representation without the burdensome chore of radically shifting district boundaries. Lani Guineer's nomination to the Justice Department raised the public's awareness of many of these alternative voting schemes, and in the wake of her failed nomination some members of Congress, as well as at least one federal judge, have expressed a desire to see more of these alternatives implemented (see Kaplan 1994a, 1994b). Others especially conservatives, have called such

*All data and the documentation necessary to replicate this analysis can be obtained from the author. I would like to thank Christina Fastnow, Elizabeth Martin, Rebecca Morton, Chuck Shipan, and Peverill Squire for comments on previous drafts of this paper.

[1]See for instance the Supreme Court's ruling in *Shaw v. Reno* (1993).

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plans (in Senator Dole's words) "vote-rigging schemes that make quotas look mild" (Kaplan 1994a).

Although most of the debate concerning multi-member voting schemes has focused on civil rights and minority-versus-majority representation, the effect of multi-member districts and cumulative voting on the internal workings of a legislature has largely been ignored. Yet evidence from legislatures around the world suggests that the electoral system can have a profound effect on the internal divisions within a legislative body. Legislatures in proportional representation systems, for instance, are often more partisan in their activities, and the parties themselves appear to be more unified than those under single-member plurality (see for instance Downs 1957, ch. 8; Sartori 1976). The Socialists and Christian Democrats in Italy, for example, are typically regarded as being more ideologically distinct than, say, the Democrats and Republicans in the United States. Thus, there is at least some reason to believe that the process by which people are elected to a legislature may affect the unity of each party in the legislature and, in turn, the extent to which a legislature conducts its business under the influence of a strong or weak party authority.

This paper seeks to explain how the intra-party composition in a legislature differs as a result of changing the electoral system's district magnitude, holding all else constant. Specifically, I model the difference between parties in a legislature elected under single-member plurality and those where the number of seats per district is larger, though still relatively small. Using spatial models to describe the candidates' behavior under each system, I am able to show that the kinds of candidates elected will differ under the two types of elections and that the aggregation of these candidates into a legislature yields different intra-party distributions of legislators. The structure of the paper is as follows: Section 2 briefly compares the results typically found in spatial models of single-member plurality with those in models of multi-member districts. Section 3 then provides a mathematical explanation for why the parties in a legislature, which are simply aggregates of winning candidates across the legislative districts, ought to differ under each type of system, given the results described in Section 2. These predictions are then tested in Section 4 using data from the Illinois state legislature, an assembly which has used both systems to elect its members. Finally, a summary of the findings and concluding remarks are offered in Section 5.

2. A Comparison Between Models of Single- and Multi-Member District Elections

The fundamental difference between elections in single-member districts and those in multi-member districts concerns the number of candidates under each system. Applying Duverger's Law and Duverger's Hy-

pothesis (see Duverger 1953; Riker 1982, 1986) to candidates, political scientists have typically considered single-member district elections to be between two candidates and multi-member races to be between more than two candidates. Of course in the real world it is often the case that many more than two candidates enter into a single-member election, but usually the "effective" number of candidates converges to two, since voters are wary of "wasting" their votes on nonviable candidates. In many if not most spatial models of single-member contests, an election-oriented third candidate will not enter into the race because his or her chances of winning are typically zero (see Shepsle 1991 for a discussion of formal models that address Duverger's Law).[2]

In typical models of single-member plurality contests, then, the equilibrium result is that two candidates converge upon the median voter. This familiar outcome, made famous by Hotelling (1929) and Downs, has become so common to students of American politics as to be almost second nature. The median-voter outcome is admittedly predicated upon a number of assumptions, such as a continuous policy space, voters with single-peaked utility functions, and a lack of abstention, but many of these assumptions can be relaxed or modified without seriously undermining the model's results. Thus, for the purposes of this project, I will assume a unidimensional policy space and use the median voter to describe the theoretical location of candidates competing in single-member plurality races.

In multi-member elections, the predicted location of candidates is much more ambiguous. Hotelling originally speculated that in instances where three or more competitors were involved, the competitors would behave as they did in Hotelling's original model and gravitate toward the median. But Chamberlain (1933, Appendix C) quickly challenged Hotelling's claim, noting that "as soon as there are three [competitors], the one who is caught between the other two will move to the outer edge of the group, and a series of such moves, always by the one left in the center, will disperse the group" (quoted in Cox 1990a). Eaton and Lipsey (1975) formally proved Chamberlain's claim, demonstrating that when equilibria do exist for contests between more than two competitors, the equilibria are located away from the median voter.

The models of Hotelling, Chamberlain, and Eaton and Lipsey, however, were all developed in an economic context where firms seek to maximize their share of the market. These models translate easily to the political

[2]This is not to suggest that there is a consensus across formal models with respect to Duverger's Law. In fact, equilibrium results that support Duverger, though common, are highly sensitive to assumptions about the voter's and candidates' motivations, capabilities, and sophistication (see Shepsle 1991). There is good empirical and theoretical support, nevertheless, for Duverger at the level of candidates.

world where candidates seek to maximize their share of the vote, but in multi-member district elections candidates are also concerned about their rank of finish. In a multi-member district where two seats are chosen, for instance, a candidate may be better off having secured second place than being in a five-way tie for first. Denzau, Kats, and Slutsky (1985), followed by Greenberg and Shepsle (1987), modeled such races where candidates have both vote and rank objectives and found equilibria to exist under certain conditions.[3] As with the equilibria derived by Eaton and Lipsey, these multi-member district equilibria tend to be located away from the median, but again the equilibria are fragile to a number of assumptions. In fact, Greenberg and Shepsle's main result is an impossibility theorem: For any contest in which there are two or more winning seats, there exist distributions of voters for which no equilibrium is possible (for discussion, see Shepsle and Cohen 1990).

Thus, in the absence of at least one or more dubious assumptions, it is impossible to predict precisely where election-motivated candidates should position themselves in multi-member contests. It is possible, nevertheless, to describe in general the candidates' strategies relative to the district median. Cox (1990a, 1990b) does exactly this by considering a wide range of factors governing multi-member district contests, which he then groups into two categories: *centripetal,* or centrist-directed forces, and *centrifugal,* or dispersion-directed forces. On the whole, he finds that increasing the district magnitude and the number of candidates, allowing for partial abstention and cumulative voting, and decreasing the number of votes per voter all encourage candidates to disperse away from the median voter.[4] These results, moreover, are mostly robust to distributional assumptions and whether or not voters vote sincerely or strategically.[5] It should be noted that there exist a number of scenarios in Cox's model in which candidates in multi-member contests would strategically gravitate to the median, but such scenarios are often artificial and do not apply to the specific empirical case examined in this project. For most multi-member district cases, including the one studied in this article, Cox's results predict that candidates should disperse away from the median.

[3]Greenberg and Shepsle's definition of equilibrium is not the same as Denzau, Kats, and Slutsky's. In particular, Greenberg and Shepsle's definition applies to candidate entry as well as candidate location, whereas Denzau, Kats, and Slutsky set the number of candidates exogenously.

[4]In multi-member district elections, some ballot structures such as the bloc vote, the limited vote, and the cumulative vote allow voters to cast more than vote.

[5]Strategic voting here refers to a voter's recognition and avoidance of the "wasted vote" phenomenon. Austen-Smith (1987) offers a different approach to strategic voting, based on a voter's calculation of legislative outcomes, which is not considered here.

At least for this article, then, the key distinction between single-member and multi-member district elections is the location of candidates with respect to the median voter. Candidates in single-member districts will, in theory, locate themselves at the median voter, and candidates in multi-member districts will locate themselves away from the median. In practice, identifying the median voter and testing the median's influence is difficult—in fact, impossible under most circumstances (see Romer and Rosenthal 1979)—but as I will demonstrate in the next section, the difference in each system produces effects that in the aggregate are more amenable to empirical tests.

3. Aggregating Districts into Legislatures

The previous section presented a brief literature review of spatial models showing that candidates in single-member districts will behave differently than candidates in multi-member districts. In this section I apply these results to party primaries and show that the aggregate distribution of each party's candidates across districts differs according to the electoral system. Legislators, who are a subset of the distribution of party candidates, should also reflect the different distributions produced by the electoral system. In order to move from the primaries to the legislature though, an additional set of assumptions is required. First, I assume that voters are myopic, considering only the current election. Second, I assume that candidates maintain fixed positions from the primary to the general election and that their behavior in the legislature is consistent with their ideological positions. This assumption has at least some grounding in reality, since candidates who change their positions risk losing their credibility. And third, I assume that the party primaries operate in the manner described in Section 2 and that the ideological positions candidates choose maximize their chances of winning in the primaries. This assumption has fairly strong support, since failure to win in the primary precludes any chance of winning in the general election. It is possible that candidates still consider the general election in their position-taking calculus, but as long as the value of winning the primary is sufficiently high, consideration of the general election will not sway candidates from the position that maximizes their chances of winning in the primary. A candidate who placed a lower value to winning the primary and therefore chose a suboptimal location in the primary, would lose out to a candidate who either placed a higher value on winning the primary or who had a more short-sighted strategy.[6]

Given these conditions, consider a district with two parties, conve-

[6]Wright's (1989) results for United States Senate challengers are consistent with this third assumption, but much more work in the area needs to be done.

niently referred to as Democrats and Republicans, and let the median of each party be written as d and r respectively, where $d, r \in (0, 1)$. In a single-member plurality contest, each party nominates one candidate via a party primary, and the candidate closest to the district's overall median wins. The primary election is also a single-member plurality contest, and under the model described in Section 2, two party candidates converge upon their party's median in equilibrium. Thus, the Democrats' nominee is positioned at d, and the Republicans' nominee is positioned at r. Repeating this process across all the districts covered by a legislature yields a distribution of the nominees from each party. The mean and the variance of each distribution can be easily defined, since the population is finite. The mean Democratic nominee position, for instance, is given by

$$\bar{d} = \frac{1}{N} \Sigma d_i \quad \text{for } (i = 1, \ldots, N), \tag{1}$$

where d_i refers to the median Democratic position in district i and N is the total number of districts in the legislature. Similar results hold for the Republicans, although to keep the exposition simple I will limit the equations to Democrats only. The ideological spread of the party's nominees can also be estimated by computing the variance of the district party medians:

$$\text{var}(d) = \frac{1}{N} \Sigma (d_i - \bar{d})^2 \quad \text{for } (i = 1, \ldots, N). \tag{2}$$

The variance in this case is a descriptive statistic, referring to a small and finite population, and so the denominator in Equation 2 is N, rather than the customary $N - 1$ used in inferential statistics. Thus, the intra-party distribution of nominees is fairly simple to characterize since it can be computed entirely from the party's medians across the districts.

For the multi-member district situation, the party's distribution of nominees across districts is much more difficult to summarize. When M seats are available in a district, each party can be expected to nominate between 1 and M number of candidates.[7] Whenever a party decides to nominate more than one candidate, the primary election will take the form of a multi-member district election, and as has already been shown, there may be no equilibrium in this instance. A reasonable mathematical depiction of each candidate's

[7]Under a plurality rule with multi-member districts, it is often disadvantageous for a party to nominate as many candidates as there are seats. Sawyer and MacRae (1962) offer an interesting game-theoretic approach to describing parties' strategies for choosing the number of nominees to field in a multi-member district with cumulative voting.

position, however, can be given in terms of the candidate's distance from his or her party median. For example, a candidate competing in the Democratic primary in district i will have the location $d_i + \varepsilon_i$, where ε_i is some bounded random variable. Because candidates tend to disperse farther away from the median as the number of contested seats grows larger (Cox 1990b), the distribution of ε is sensitive to the district magnitude. In the original single-member plurality contest where a party nominates a single candidate, ε_i is simply the constant zero. But as the district magnitude grows and the party chooses to nominate more candidates, the variance of ε should increase.

Aggregating the party's nominees across districts for the multi-member case thus yields a new distribution of party nominees. The mean of the nominees, $\overline{d + \varepsilon}$, is simply the average of $d_i + \varepsilon_i$ across the nominees, and the variance of the nominees is now:

$$\text{var}(d + \varepsilon) = \text{var}(d) + \text{var}(\varepsilon) + 2\ \text{cov}(d, \varepsilon). \tag{3}$$

Note that because $\text{var}(\varepsilon) \geq 0$, $\{\text{var}\ (d + \varepsilon) > \text{var}(d)\}$ iff $\{\text{cov}(d, \varepsilon) > -\frac{1}{2}\ \text{var}(\varepsilon)\}$. The substantive interpretation of this result is that the distribution of a party's nominees will be more ideologically diverse (i.e., have a higher variance) under a multi-member system than under a single-member system, *as long as the covariance between d and* ε *is not strongly negative.*

This condition regarding the covariance between d and ε is not trivial, and so it may be helpful to consider what kinds of circumstances would produce a positive or negative relationship between $f(d) = d_i - \bar{d}$ and $g(\varepsilon) = \varepsilon_i - \bar{\varepsilon}$, yielding a positive or negative covariance term. The simplest way to see this relationship is to imagine a situation where a party nominates two candidates in two separate districts. Assume that the nominees are all located at some equidistant percentile from their district medians (say, for instance, the 35th and 65th percentiles), but that because the party distributions within each district may be skewed, the ideological distances from the district median may vary. Depending on how each district is distributed, several possibilities regarding the covariance between d and ε are feasible. In the first scenario, shown in Figure 1a, the districts are similarly distributed, with the only difference being that one district is more conservative than the other. The skewness in each distribution elongates the ideological distance between $-\varepsilon$ and the district median, yielding $E(\varepsilon) < 0$, but because the districts both above and below $\bar{d}$ share this feature, the covariance between d and ε is zero. Under this kind scenario $\text{var}(d) < \text{var}(d + \varepsilon)$, and so the effect of multi-member districts would be to increase the variance across the party's nominees. Similarly, if neither district is skewed, then $\text{cov}(d, \varepsilon) = 0$ regardless of the location of each district's median and the same results apply.

Figure 1A–C. Potential Distributions of Democrats for Two Districts

Figure 1A

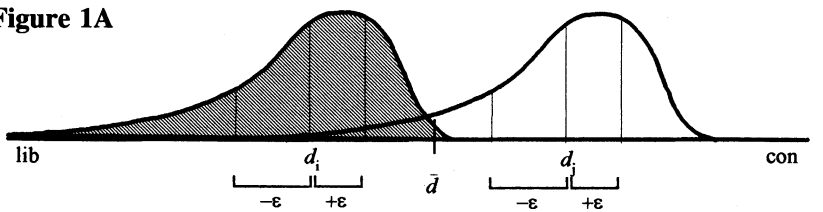


Figure 1B

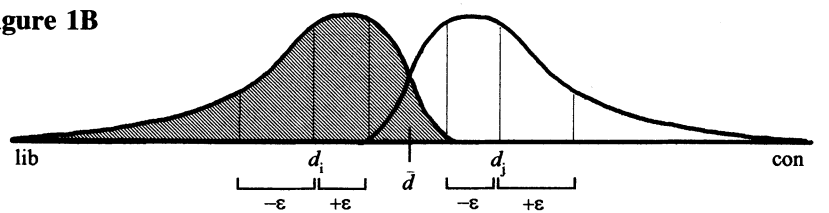
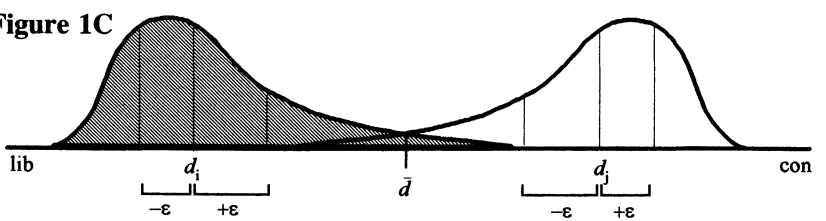


Figure 1C



In the second scenario, shown in Figure 1b, the districts have slightly different distributions. The more liberal district, d_i, is skewed to the left, while the more conservative district, d_j, is skewed to the right. In this situation the relationship between $f(d)$ and $g(\varepsilon)$ is positive, since the district with the median below $\bar{d}$ has, on average, a negative ε, while the district above $\bar{d}$ has, on average, a positive ε. Thus, $\text{cov}(d, \varepsilon) > 0$. As in the previous scenario, a multi-member district system would in this case increase the ideological variance of the party's nominees.

Finally, in the third scenario, depicted in Figure 1c, the districts are

skewed in exactly the opposite manner of the case shown in Figure 1b. Here, the more liberal district is skewed toward the conservative end of the spectrum, while the more conservative district is skewed toward the liberal end. The result is that $f(d)$ and $g(\varepsilon)$ are negatively related, and so $\text{cov}(d, \varepsilon) < 0$. Note that the effect is most pronounced when the districts become more and more skewed as they move further away from their party's center. Only in this situation would it be possible for a multi-member system to decrease the variance across a party's nominees. Such a scenario, however, is probably unusual, since it implies a strong and consistent ideological distinction between districts whose party median is more liberal than average and those whose party median is more conservative. Indeed, given such strong ideological differences, it would be strange for each group to be attracted to the same party. A possible exception may be the historical difference between northern and southern Democrats, but this difference has been decreasing for decades and stems more from historical fate than anything else. In general, it seems that this kind of pattern is probably rare and short-lived, if for no other reason than the fact that the party would become so factionalized as to render itself powerless.

In all but the rarest of cases, then, multi-member districts should increase the ideological variance across a party's pool of nominees. Although the details leading to this result are at times complex, the intuition is simple. If a party has the opportunity to elect several of its members to office from a single district, the more liberal partisans will elect candidates from the liberal wing of the party, the more conservative members will choose from the conservative wing, and so on. When these candidates are then aggregated across districts it seems reasonable that the pool of party nominees will be more diverse. Only when the party's pool of nominees is already widely dispersed, as in Figure 1c, is it possible for multi-member districts to lessen the variance.

Thus far, I have focused attention on party nominees rather than directly on the legislators. Unfortunately, the distribution of nominees is not nearly as important as the distribution of legislators, nor are data as readily available for nominees as they are for legislators. Fortunately, the general election works to magnify the distributional differences between single-member and multi-member systems. If a party's strength (or equivalently, size) in each district is unrelated to the ideology of the party members in the district, then the general election is essentially a random drawing from the party's pool of nominees (at least as far as ideology is concerned), and the results for nominees carry over to the legislature. If, however, party strength is in some way related to ideology, then the distributions of nominees and of legislators may differ.

Suppose, for instance, that Democrats who live in Republican districts

are more conservative than other Democrats. These conservative, "minority" Democrats would not be able to win seats under single-member plurality, since Republicans would consistently win those elections. Under single-member plurality, then, the variance of Democrats in the legislature would be smaller than the variance of party nominees, because the party's conservative nominees would be excluded from the legislature. This pattern holds as long as the relationship between party size and ideology across districts is monotonic. In multi-member districts, on the other hand, it is more difficult to predict *a priori* if one ideological position is more advantaged than another, and so the relationship between ideology and party success across districts is likely to be weaker. Even where such a relationship exists, though, the multi-member system will produce a smaller change from the distribution of nominees to legislators, since even minority districts will win seats to the legislature. Thus, the comparative static predictions for nominees carry over to legislators: a party's legislators should be more diverse under a multi-member system than under single-member plurality.

It should be noted that the model described in this section pertains to systems with a democratic primary system and so does not apply to many proportional representation systems where candidates are placed on a party list by a small, sometimes homogeneous group of elites within the party. In addition, I have assumed that the number of parties is held constant across electoral systems, whereas Duverger (1953), Riker (1986), and Taagepera and Shugart (1989) among others have demonstrated that the number of contested seats in a district heavily determines the number of viable parties competing for those seats. The model presented here, then, is more appropriate in cases where the number of parties is more or less fixed, such as in sub-national elections, and where a democratic primary is in place. These qualifications no doubt account for much of the discrepancy between the model's predictions and the long-standing reputation for many of the world's multi-member district systems to have more homogeneous parties than those under single-member plurality systems. But as will be seen in Section 4, when primaries exist and the number of parties is constant, empirical results confirm the model's predictions.

4. Testing the Effects of District Magnitude: The Illinois Case

Background

The system used to elect the Illinois General Assembly during the period 1870–1982 offers an ideal test for the results derived in Sections 2 and 3. Before presenting the data, though, a little historical background is helpful. As it is today, the Illinois of the nineteenth century was politically defined by the geographic regions of the state. In 1867, before the state

drafted a new constitution, one could draw a line from east to west across the state at about the latitude of Springfield such that districts to the north of the line elected 52 Republicans and no Democrats, while those to the south elected 8 Republicans and 24 Democrats (Sawyer and MacRae 1962). To decrease the level of party sectionalism in the state, the state adopted a system whereby voters in each of the state's legislative districts elected one senator and three representatives (see Everson 1992). For the House races, voters were given three votes, which they could then distribute to one, two, or three of the candidates (of which there were typically four), and the three candidates with the most votes won. Primaries were similarly conducted, with multiple winners and cumulative voting. This approach proved to be remarkably successful in meeting the state's goal of minority party representation. In the first election after the change was adopted, all but one of the state's districts were represented by members from each party (Sawyer and MacRae 1962).

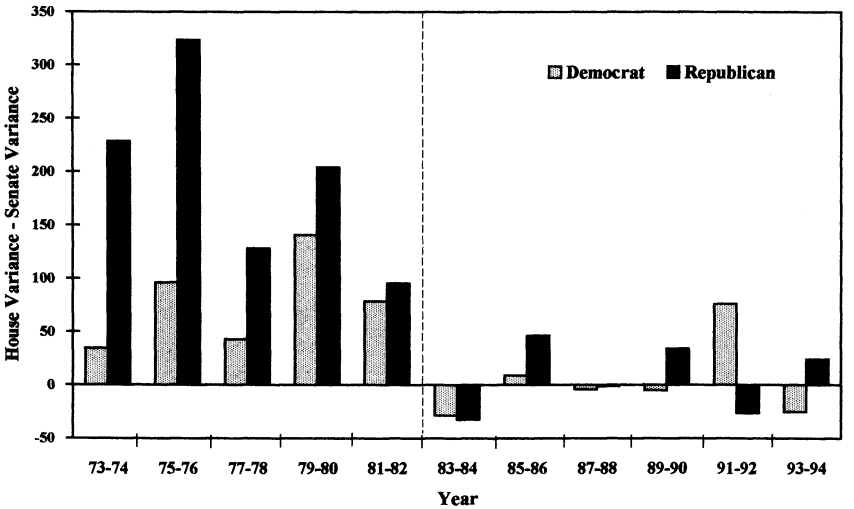
The electoral system remained essentially unchanged over the next century, and in 1970, when the state adopted a new constitution, voters solidly chose to keep the multi-member district system (Van der Slik and Redfield 1986). In 1980, however, after the legislature had voted to give itself an unpopular pay-raise, a campaign was started to reduce the size of the House by a third, from 177 members to 118, and to eliminate the cumulative vote system by moving to single-member districts. The proposal, which backers claimed would save money and make legislators more accountable, was put on the November ballot by initiative and easily passed with 69% of the vote (Roberts and Dorn 1990). Thus, from 1982 on, there have been two House districts residing in each of the 59 Senate districts, and members of both chambers have been elected through single-member plurality.

History, then, has provided an excellent opportunity to study the effect of multi-member districts. According to the theory laid out earlier in the paper, one would expect that prior to 1982 the parties in the House would be more ideologically diverse than the parties in the Senate. After 1982 the results should change, although the two chambers need not be identical since the House and Senate districts are no longer perfectly coterminous.

The Data.

To get a sense of the ideological distribution of each party, I use legislative ratings provided by IPAC, the Illinois Political Action Committee, a state political offspring of the Illinois Chamber of Commerce. The IPAC ratings are similar to ADA or ACU scores in that IPAC selects a number of key votes that it feels strongly about and then tallies the percentage of votes in which a member votes in agreement with IPAC. Thus, a score of 100 represents a "pro-business" legislator who votes in agreement with

Figure 2. Difference Between House and Senate Variances of IPAC Scores



IPAC every time. A score of 0 signifies an "anti-business" candidate, voting against IPAC on every key vote for that legislative session. The scores, of course, are not a perfect indicator of ideology, but they should be sufficiently correlated with ideology to give a good approximation.

Results

Scores for members in both chambers were collected for the sessions from 1973 to 1994, yielding five sessions under the multi-member system and six sessions under the single-member system. Figure 2 shows the difference in the variance of IPAC scores between the two chambers for each party. Under the multi-member system, variances in the House are considerably larger than the corresponding variances in the Senate, particularly for Republicans, who tended to have a higher variance in the House than Democrats (see appendix). When the House moves to a single-member system, however, the difference between the two chambers immediately disappears, and any distinction between the House and Senate appears to be small and random.

The pattern in Figure 2 confirms the perceptions of other political scholars who have examined the Illinois legislature. For instance, Van der Slik and Redfield intuitively sense such a pattern when they claim that the

cutback increased party discipline; however, they offered no detailed theory to explain the result. It is my belief, though, that the outcome of greater party cohesion came principally from a smaller ideological variance within each party, produced by a change in the electoral system, which in turn made partisans in the House more amenable to greater party control. The process is similar to Rohde's (1991) description of increased partisanship in the United States House. In the United States Congress, sectionalism within the parties, particularly between northern and southern Democrats, decreased as a result of realigning forces in the electorate. The increased homogeneity within the Democrats made a stronger party leadership more desirable to members, and so they were more willing to establish greater party control. In Illinois, the electoral forces that produced greater homogeneity within the parties are different, but the effect of this homogeneity on party leadership is probably the same.

5. Conclusion

The data offer strong support for the notion that parties elected under multi-member districts will look and behave differently than parties elected under single-member districts. All else held constant, parties under multi-member districts will be more ideologically diverse, which may undermine the ability of party leaders to build coalitions and enforce bargains. This result is somewhat contrary to the intuition one may get from looking at proportional representation systems, where the number of seats per district is large and party discipline is high. The strength of party discipline in P.R. systems however, comes from the system's ability to incorporate more parties into the legislature and, for some systems, the manner in which candidates are nominated. Also, greater party cohesion in many P.R. systems may be related to the electoral link between the executive and the parliament, which is absent in the United States.

The findings presented here, then, may be more important with respect to local governments, where the number of parties is usually fixed, than for national governments, where increasing the number of seats tends to increase the number of parties. Given this, it should be no surprise that in many local governments, where inner-party factions can cut deeply across racial, ethnic, or religious lines, multi-member district systems are fairly common. Such a system preserves the two-party structure but allows factions within each party to be represented. The election of various factions within a party, however, can weaken the party within the legislature, thereby undermining the ability of party leaders to develop and sustain bargains. It thus behooves both sides in the debate over alternative voting schemes to consider possible effects that a change in the electoral system can have on a legislature. If one's greatest concern in a local legislature is

partisan gridlock, multi-member districts could potentially ease the partisan feuding by making each party more ideologically diverse. If, on the other hand, one sees party cohesion as an asset that can be used to build lasting coalitions on complicated, multi-faceted pieces of legislation, then perhaps multi-member districts are less desirable.

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APPENDIX

Table A1. Mean and Variance of IPAC Scores by Legislative Chamber

		Avg. IPAC Score			Var. of IPAC Scores		
Year		House	Senate	Difference	House	Senate	Difference
73–74	Dem	28	40	−13	120	86	34
	Rep	**67**	**87**	**−19**	**262**	**33**	**229**
75–76	Dem	30	26	4	196	100	96
	Rep	**83**	**94**	**−11**	**347**	**23**	**324**
77–78	Dem	23	28	−5	171	128	43
	Rep	**85**	**92**	**−7**	**180**	**52**	**128**
79–80	Dem	32	38	−6	188	47	141
	Rep	**79**	**87**	**−8**	**234**	**30**	**204**
81–82	Dem	35	21	14	106	28	78
	Rep	**79**	**89**	**−9**	**201**	**106**	**95**
83–84	Dem	45	47	−2	52	80	−29
	Rep	**88**	**85**	**3**	**44**	**76**	**−32**
85–86	Dem	37	34	3	65	57	9
	Rep	**82**	**89**	**−7**	**96**	**50**	**46**
87–88	Dem	40	39	1	69	74	−4
	Rep	**85**	**88**	**−2**	**124**	**125**	**−1**
89–90	Dem	32	39	−7	104	109	−5
	Rep	**85**	**80**	**4**	**93**	**59**	**34**
91–92	Dem	24	24	0	124	48	76
	Rep	**88**	**90**	**−3**	**90**	**117**	**−27**
93–94	Dem	43	50	−7	41	66	−25
	Rep	**93**	**98**	**−5**	**34**	**10**	**24**

Source: Illinois Chamber of Commerce, 1973–94.
Note: Differences may not compute exactly due to rounding.

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